

R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

Applicants thank Examiner Le for the indication of allowable matter.

SUPPORT FOR THE SPECIFICATION AMENDMENTS

Support for the specification amendments can be found in the specification, for example, on page 6 line 20 and FIGS. 3a and 3b as originally filed. Regarding the paragraph starting on page 6, line 17, the wording across the top of FIG. 3a associates (i) the source with "vout" which matches the "pad-vout" on FIG. 3b and (ii) draft with "vdd" which matches the "pad-vdd" on FIG. 3a. Regarding the paragraph starting on page 11, line 14, reference numbers have been added to identify the multiplexer and the comparator mentioned in lines 15-16. Thus, no new matter has been added.

SUPPORT FOR THE CLAIM AMENDMENTS

Support for the claim amendments and new claims can be found in the specification, for example, on page 7 lines 1-5, page 10 lines 15-20, page 11 lines 14-18 and FIG. 3b as originally filed, and in claim 19. Thus, no new matter has been added.

IN THE DRAWINGS

A proposed amendment to FIG. 13 is enclosed adding the comparator mentioned on page 11, line 16 of the specification, as originally filed. The reference number of the multiplexer is also changed from 140 to 142 since the number 140 is also used in FIG. 5 to identify a channel. Thus, no new matter has been added. Approval of the proposed drawing amendment by the Examiner is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 1, 3-5, 10, 11, 13 and 14 under 35 U.S.C. §103(a) as being unpatentable over Lien '651 in view of Talaga, Jr. '921 (hereafter Talaga) has been obviated by appropriate amendment and should be withdrawn.

The rejection of claims 1, 3-5, 7-11, 13-17 and 20 under 35 U.S.C. §103(a) as being unpatentable over Ito et al. '247 (hereafter Ito) in view of Lien and Talaga has been obviated by appropriate amendment and should be withdrawn.

The rejection of claim 18 under 35 U.S.C. §103(a) as being unpatentable over Goto et al. '278 (hereafter Goto) in view of Lien and Talaga is respectfully traversed and should be withdrawn.

Lien concerns a high voltage tolerable input buffer.
(Title). Talaga concerns a differential comparator with an

extended input range (Title). Ito concerns a CMIS circuit and its drivers (Title). Goto concerns a voltage comparator circuit (Title). Lien, Talaga, Ito and Goto, alone or in combination, do not appear to teach or suggest every element as claimed. As such, the claimed invention is fully patentable over the cited references and the rejection should be withdrawn.

Claim 1 provides a voltage drop from a first gate to a first output is non-linear as a function of an input voltage. In contrast, Lien, Ito and Talaga each appear to be silent regarding a non-linear transfer characteristic. Therefore, Lien, Ito and Talaga, alone or in combination, do not appear to teach or suggest voltage drop from a first gate to a first output is non-linear as a function of an input voltage as presently claimed. Claim 11 provides language similar to claim 1. As such, claims 1 and 11 are fully patentable over the cited reference and the rejection should be withdrawn.

Claim 18 provides a first resistive element and a second resistive element. Despite the assertion on page 4, lines 15-16, neither the current source 53 nor the current source 54 in FIG. 12 of Goto is a resistor. Therefore, the Office Action has failed to establish *prima facie* obviousness for lack of a first resistive element and a second resistive element as presently claimed. As such, claim 18 is fully patentable over the cited reference and the rejection should be withdrawn.

Claim 20 provides a first source of a first device and a second source of a second device directly coupled to an output. In contrast, FIG. 3 of Ito shows the source node S3 of transistor 13 directly connected to a gate of a transistor 21 and a source node S4 of transistor 14 directly connected to a gate of a transistor 22. Ito appears to be silent regarding the source nodes S3 and S4 being directly connected to a common output. Therefore, Ito, Lien and Talaga, alone or in combination, do not appear to teach or suggest a first source of a first device and a second source of a second device directly coupled to an output as presently claimed. As such, claim 20 is fully patentable over the cited references and the rejection should be withdrawn.

Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit
Account No. 12-2252.

Respectfully submitted,
CHRISTOPHER P. MAIORANA, P.C.

Christopher P. Maiorana
Registration No. 42,829

Dated: October 30, 2003

c/o Peter Scott
LSI Logic Corporation
1621 Barber Lane, M/S D-106 Legal
Milpitas, CA 95035

Docket No.: 02-0003 / 1496.00201